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## **Gerald W. Winegrad** **Vice President for Policy of the American Bird Conservancy**

STATEMENT OF THE AMERICAN BIRD CONSERVANCY  
BEFORE THE COMMITTEE ON RESOURCES, SUBCOMMITTEE ON FISHERIES CONSERVATION,  
WILDLIFE AND OCEANS

IN OPPOSITION TO  
H.R. 3320, THE AMERICAN AQUACULTURE AND FISHERY RESOURCES PROTECTION ACT  
JUNE 24, 2004

I am Gerald W. Winegrad, Vice President for Policy of the American Bird Conservancy. ABC is a national non-profit organization dedicated to the conservation of wild native birds in the Americas. ABC has more than 300 partner organizations in the Americas primarily through its leadership roles in the North American Bird Conservation Initiative, Partners in Flight, ABC's Bird Conservation Alliance, and ABC's international network. The Bird Conservation Alliance, with which I work, has more than 85 member organizations that work collaboratively for bird conservation and these member organizations include the country's most prestigious ornithological and conservation groups. ABC has ornithologists and other staff headquartered in Washington, DC and The Plains, Virginia. We also have offices and staff in New Hampshire, Maine, Maryland, Indiana, Missouri, Colorado, Montana, and Oregon.

American Bird Conservancy is OPPOSED TO H.R. 3320. This legislation would usurp the authority for take and management of migratory birds from the U.S. Fish and Wildlife Service (FWS). The legislation, termed the American Aquaculture and Fishery Resources Protection Act, would allow the Animal and Plant Health Inspection Service of the Department of Agriculture Wildlife (APHIS) to issue depredation permits and manage and take all migratory birds (not just piscivorous birds), shifting this authority from the professional migratory bird specialists at the FWS.

H.R. 3320 also would remove all such management actions from public review by exempting APHIS from the National Environmental Policy Act. This legislation would undo 85 years of migratory bird conservation under the Migratory Bird Treaty Act and its administration by FWS. This extreme approach to bird conservation is not warranted, is unnecessary, and could lead to serious impacts to migratory bird resources. We are very concerned that the legislation is aimed at piscivorous birds and that these birds are wrongly being blamed for fisheries declines around the U.S. without a sound scientific basis.

### OPPOSITION TO NEPA EXEMPTION.

We strongly oppose exempting migratory bird management activities by APHIS, other USDA agencies, or any other federal agencies from the National Environmental Policy Act. Such a total exemption from NEPA is unheard of and would set a terrible precedent for other federal actions. Our nation's environmental policies are based on democratic principles of encouraging scientific review and public input, as well as the review and input of other federal and state agencies. The exemption would release not only APHIS but also Forest Service and all other USDA activities from complying with NEPA. Exempting APHIS and Forest Service bird management activities from NEPA would exclude scientists, the public, and other governmental agencies from the decision-making process. Thus, such controversial APHIS proposals and projects as follows would be excluded from FWS professional review, independent scientific review, and public comment:

1) VULTURE TAKE IN VIRGINIA. APHIS killed over 550 Black and Turkey Vultures in Virginia in 2002 and requested an augmented MBTA Permit from the FWS to greatly escalate the take to 2,500 Black and 1,500 Turkey Vultures. By comparison, from FY 1989 through FY 1991, the NATIONWIDE take of vultures by APHIS was 157 birds. The escalated permit request for vulture take in Virginia was changed to a much lower number after further scientific scrutiny, public input, and FWS review. APHIS acknowledged that applying for such a large number was a mistake. All of the take of vultures (migratory birds) was conducted

by APHIS under the current system of FWS MBTA review and permitting.

2) RED-WINGED BLACKBIRD TAKE IN THE DAKOTAS. APHIS proposed killing up to 2 million birds, primarily Red-winged Blackbirds, per year in the spring in South Dakota, with the acutely toxic avicide DRC-1339. This was proposed to putatively protect sunflower crops. APHIS was rebuffed in their attempt to gain a FWS MBTA take permit when the FWS concluded there was a lack of scientific evidence that poisoning in the spring would have any effect on reducing late summer/early fall blackbird populations, or in reducing damage to ripening sunflowers. The FWS noted that the proposed lethal baiting method was proven to attract and kill non-target migratory birds. Because of NEPA requirements, APHIS prepared a NEPA scoping document for an Environmental Impact Statement (EIS). Then, after scientists, ABC and many other conservation groups detailed science-based objections to this program, the proposal was rejected. APHIS killed 230,000 blackbirds in spring 1995 and an estimated maximum of 500,000 birds from 1996-1999. These programs were ineffective in reducing sunflower seed losses from blackbirds. All of this take of migratory birds was conducted by APHIS under the current system of FWS MBTA review and permitting.

3) WATERBIRD TAKE IN WASHINGTON STATE. APHIS in Washington State has been shooting thousands of fish-eating birds at dams and hatcheries along the Columbia and Snake Rivers because the birds eat juvenile salmon. Under this program, from FY 1997 through 2002, APHIS has killed 2,381 Caspian Terns, 852 Great Blue Herons, 820 Black-crowned Night-Herons, 1,341 Common Mergansers, more than 62,000 Ring-billed, Herring, California, and other Gulls, 273 grebes (nearly all Western Grebes), and more than 5,200 Double-crested Cormorants. This take of fish-eating birds is being done without any research-based evidence that the birds are causing any effects on adult returns of salmon. After conservationists' intervention through the NEPA process, take of Caspian Terns has ended and other take is down. All of this take of migratory birds was conducted by APHIS under the current system of FWS MBTA review and permitting.

#### OPPOSITION TO SHIFTING MIGRATORY BIRD MANAGEMENT.

We strongly oppose the provisions of H.R. 3320 switching migratory bird management to USDA/APHIS. The bill would allow any employee of APHIS to issue depredation permits to stakeholders or cooperators and to manage and take migratory birds. Thus, APHIS would assume migratory bird management under the Migratory Bird Treaty Act of 1918. This would usurp 86 years of U.S. Government migratory bird management and remove authority under the MBTA from the wildlife and bird specialists in the U.S. Fish and Wildlife Service. APHIS is ill equipped to assume this responsibility.

APHIS's Wildlife Services unit (formerly Animal Damage Control) primarily functions to control agricultural and other damage from wildlife, including birds. APHIS focuses on managing wildlife conflicts, preventing wildlife damage to agriculture, and protecting communities from wildlife threats. The focus and mandate of APHIS is not to manage birds to assure that healthy populations flourish. This statutory switch for migratory bird management proposed in H.R. 3320 is contrary to the purposes and intent of the MBTA and the Migratory Bird Conventions. The Migratory Bird Conventions impose substantive obligations on the United States, Canada, Mexico, Japan, and Russia for the conservation of migratory birds and their habitats and articulate important conservation principles, such as:

- 1) To conserve and manage migratory birds internationally;
- 2) To sustain healthy migratory bird populations for consumptive and non-consumptive uses;
- 3) To provide for, maintain, and protect habitat necessary for the conservation of migratory birds; and
- 4) To restore depleted populations of migratory birds.

The FWS, not USDA/APHIS/WS, is able to fulfill these obligations to migratory birds under the conventions and the MBTA of 1918.

Of the 852 native avian species found in the U.S., 778 are migratory non-game birds and roughly 350 are migratory songbirds species. About 300 of these are neotropical migrants that migrate between summer breeding areas in the United States and Canada and wintering areas in Latin American and the Caribbean. Many of these migratory birds are in serious decline. There has been documentation of an overall 50% decline in the volume of annual flights over the Gulf of Mexico in the last twenty years of neotropical migratory songbirds.

Of the 852 native birds found in the U.S., 90 are listed as endangered or threatened under the Endangered

Species Act. Another 131 species are listed by the U.S. Fish and Wildlife Service as Birds of Management Concern, meaning that they may become candidates for listing under the ESA without additional conservation action or that special attention is warranted to prevent declines. Congress mandated this latter list under 1988 amendments to the Fish and Wildlife Conservation Act. Thus, over one-quarter of all U.S. native bird species are either endangered or threatened with extinction or may become candidates for ESA listing without additional management measures.

Priority must be given to the protection and recovery of these species. Ironically, the population declines of many migratory bird species come at a time when bird-related recreation in the U.S. is hitting an all-time high in popularity. The National Survey on Recreation and the Environment tallies 71 million Americans participating in some form of bird-related activities in 2001. According to the 2001 report, *Birding in the U.S.: A Demographic and Economic Analysis*, bird-related expenditures added \$85 billion in overall economic impacts, generated \$13 billion in state and federal income taxes, and created 863,406 jobs. In Arkansas, 24% of the population over 16 years of age participated in some bird feeding or watching activities in 2001; in Mississippi it was 18%.

Switching management to APHIS would destroy years of conservation efforts and undermine the networks built around such major partnerships as the North American Bird Conservation Initiative. The FWS has co-operated with APHIS over the years and there is no need to destroy the current management system.

H.R. 3320 IS UNNECESSARY--CONTROL OF FISH-EATING BIRDS IS SUFFICIENT.

Under the current U.S. FWS administration of the MBTA, lethal take and other non-lethal management tools are regularly employed to control damage or perceived damage from migratory birds to agriculture, fisheries (including aquaculture), property, and public resources. The killing by APHIS under FWS MBTA permits of hundreds of Vultures in Virginia, hundreds of thousands of Red-winged Blackbirds in the Dakotas, and tens of thousands of fish-eating waterbirds in Washington State, all cited above, are indicative of this current system. APHIS enjoys a special privilege not granted others under the FWS MBTA permitting process. Statewide depredation permits are issued to APHIS that apply to all migratory bird depredation control in a state or even a region.

DOUBLE-CRESTED CORMORANTS (PHALACROCORAX AURITUS).

Since H.R. 3320 has been titled the American Aquaculture and Fishery Resources Protection Act, we will focus on the control of fish-eating waterbirds, such as the much-maligned Double-crested Cormorant. The Double-crested Cormorant (DCCO, *Phalacrocorax auritus*) is one of more than 100 native birds whose diet consists nearly exclusively or partly of fish. Birds such as Bald Eagles, Ospreys, Great Blue Herons, Great Egrets, Black Skimmers, Greater and Lesser Scaups, Hooded, Common and Red-Breasted Mergansers, Common Loons, Belted Kingfishers, and Caspian Terns, all eat fish. There are 73 U.S. breeding avian species that eat fish as their exclusive or primary diet and 19 that eat fish as a secondary food source. As fisheries decline due to over-fishing, habitat degradation, dams, invasive species, and pollutants, birds that eat fish are easy targets for fishermen. Casting of DCCOs as scapegoats for these fishery declines is without scientific merit, and the birds represent an easy public target rather than dealing with the real causes of decline by restricting harvest, restoring habitat, restricting harmful contaminants, eliminating invasives, and breaching dams or installing fish passages on dams.

Waterbird scientists believe that most DCCO population increases we have seen in the U.S. represent a population recovery of a species that was significantly reduced or nearly extirpated from most of its range during the period of the 1940's to the 1970's. Many historical records from across the continent indicate that the species was or may have been more abundant and widespread than is currently presumed. While most of these early accounts are largely anecdotal, many report huge numbers of cormorants, suggesting that recent population increases may represent recovery towards historical (pre-settlement) levels in certain regions. In some areas where the DCCO has been documented as a recent breeder, the species is actually re-colonizing after an absence of 50 – 300 years.

Cormorants were the victims of persecution until full protection by the MBTA in 1972. Cormorants also declined from accumulation of high levels of DDT through their food supply, which interfered with reproduction. Depressed populations began to increase after MBTA protection and after DDT was banned. From the early 1990s until 2000, population growth rates have slowed or appeared to stabilize in many states and provinces. There have been declines since 1990 in West Coast, Alaska and Atlantic populations.

In British Columbia, the Double-crested Cormorant is listed as Vulnerable and is being considered for Threatened status.

Among the 24 states covered by the FWS Public Resource Depredation Order, the DCCO was extirpated as a breeding species from Indiana, Iowa, Kentucky, Michigan, Ohio, Texas, and possibly from Louisiana and Missouri. In Arkansas, Mississippi, and Tennessee, the DCCO returned as a breeding species only in the late 1990s, after several decades of absence. Only six nest sites were known in these three states combined in 2001. In the other states, nesting resumed in the 1970s and 1980s. In Wisconsin, numbers dropped so low between the 1950s-1970s that in 1972, the state listed the DCCO as Endangered. Under basic conservation principles, a re-occupation of historic range is to be encouraged and supported by sound management principles. One of four goals defined in the North American Waterbird Conservation Plan released in 2002 and published through ABC, is such a re-establishment of displaced waterbird populations.

On October 8, 2003, the FWS issued a Final EIS, a new Rule, and a Record of Decision that established a Public Resource Depredation Order (PRDO) for Double-crested Cormorants. These provisions were developed with APHIS and would allow state and federal agencies in 24 states (using APHIS/WS) to take cormorants without FWS MBTA permits, if the cormorants were found to be "injurious to public resources." Thus, APHIS/WS currently can kill unlimited numbers of cormorants without permits and APHIS has initiated control efforts in a number of states under the PRDO. APHIS/WS also gained authority they had been seeking to kill unlimited numbers of Double-crested Cormorants at roost sites in 12 southern aquaculture states without permits, in addition to the shooting already allowed at aquaculture facilities in 13 states under a FWS 1998 Depredation Order. Under that aquaculture depredation order, an average of 35,874 DCCOs was reported killed each year from 1998-2000 in the 13 states. This number is probably low due to difficulties monitoring reporting. An additional 11,254 DCCOs were killed annually during this period under other FWS MBTA permits, including individual permits for aquaculture outside the 13 states.

In addition, thousands of cormorant eggs were destroyed. The current permitting system, under the management of the U.S. FWS, coupled with the 2003 Cormorant Depredation Order and the 1998 Cormorant Aquaculture Depredation Order, already provide more than enough control to APHIS, the aquaculture industry and the states. The existing permit system also allows for control of other piscivorous birds where science warrants. The lethal take of tens of thousands of fish-eating gulls, cormorants, terns, herons, and waterfowl under U.S. FWS permits in Washington State alone documents such controls are occurring.

ABC has emphasized that the need for any Double-crested Cormorant control and the control of any other piscivorous bird species should be based exclusively on sound science. We are aware of the increasing political pressure brought on by perceptions that increasing DCCO populations are causing declines in sport fish populations and other resource declines. Much of the conflict is due to perceived effects, conflicts, and concerns. With the exception of aquaculture facilities and a few other isolated cases, little scientific documentation of effects of any significant consequence to resources from DCCOs or other piscivorous birds exists. Concerns or perceived conflicts should not translate to population management; the proper course to address concerns and perceptions is through education and outreach. Management should be biologically justified based on the best available science. Authority for management should remain in the U.S. FWS.

We now divide our statement into the three distinct fisheries giving rise to the conflicts between fisheries and birds, since nearly all public support for cormorant and other fish-eating bird population control or eradication and the political response is based on perceived impacts to commercial, recreational, or aquaculture fish.

#### A. COMMERCIAL FISHERIES.

Last year, the U.S. FWS completed an Environmental Impact Statement on Double-crested Cormorant Management. The EIS concluded that "... there is no sufficient scientific evidence to justify controlling DCCOs on a national level to benefit open water commercial fisheries. Where site-specific problems are significant, the Service's practice is, and will continue to be, to issue depredation permits to alleviate impacts." Cormorants were found in the EIS to have no demonstrated meaningful impacts to commercial open-water fisheries. Waterbird scientists concur. We believe that the best science available indicates that piscivorous birds, including Double-crested Cormorants, do not adversely impact commercial species so as to justify any changes in current management practices.

## B. RECREATIONAL FISHERIES.

The DCCO has a diverse diet and, in general, primary prey are forage species of little or no commercial value, but cormorants will take advantage of abundant species in the right size range. Over 250 fish species from more than 60 families have been reported as prey items. Occasionally, other aquatic animals, such as insects, crustaceans and amphibians are also taken. DCCOs are opportunists and eat a wide variety of readily available prey species. However, sport and commercial fish make up small parts of their diets.

During the FWS Cormorant EIS scoping meetings and public comment period, the largest proportion of comments supporting increased controls came from individuals concerned with cormorants affecting recreational fisheries (39%).

Leading ornithologists and specialists in predator-prey relationships commented on the FWS Cormorant EIS and opposed the depredation order and winter roost control. Their objections were based on the EIS support for a depredation order not being supported by sound science. For example, the five PhD's signing the comment letter on the EIS from the prestigious American Ornithologists' Union (AOU) stated in regard to recreational and commercial fisheries:

"Every study for about a century has shown that cormorants do not impact significantly the demography of desirable fish, except at very small scales. The studies listed in the DEIS are no different. The results of peer-reviewed studies show no significant impact by cormorant predation on desirable fish. The other studies, which are not published in scientific journals and are issued without impartial external review, show equivocal findings. Trapp et al. 1999 concluded that DCCOs have only a minor effect on sport fisheries. The best evidence given for important effects of DCCOs on fish are mostly unpublished, equivocal or suggest only minor effects (EIS pages 50-51), see Table 1."

As noted in the AOU letter from the five scientists:

"The scientific evidence supporting the proposed action is weak; the analysis of the data is simplistic; the proposed management plan is inadequate and ineffective; the consequences of the proposed action are punitive instead of mitigatory; and the assessment of success is based on public perception, and not on scientific results."

Linda Wires, a Research Associate at the University of Minnesota in the Department of Fisheries, Wildlife and Conservation Biology, has been working with Dr. Francesca Cuthbert on colonial waterbird issues in the Great Lakes for the last seven years and is the lead author of the Double-crested Cormorant Status Assessment for North America commissioned by the FWS as part of the EIS process. She is an expert on fish-eating birds and prey relationships. In her letter of comment on the Cormorant DEIS in 2002, she notes in opposing the Depredation Order:

"As is the case with nearly all of the cormorant literature currently available, the EIS mostly documents 'concern over impacts' rather than 'actual impacts;' the words 'possible', 'may', 'perceived' and 'concern' are used throughout the document when discussing impacts. From a biological standpoint, concern about impacts is a different issue than documenting real impacts.... Overall, the EIS documents concern about impacts very well; however, the impacts themselves and a biological necessity for control are not well documented.... The studies done in the Les Cheneaux Islands, Lake of the Woods and southeastern U.S. lakes, ponds and reservoirs, all indicate cormorants are not responsible for fish declines in these areas. I disagree that the study conducted in eastern Lake Ontario had appropriate data for analyzing potential DCCO-fish interactions (see Wires et al. 2001). That leaves only the Oneida Lake study as documentation of negative impacts to a fishery. It's important to note that models of this population predict elimination of the entire cormorant population on Oneida Lake will not lead to recovery of the walleye population to its formerly large size, and that anglers remain the most important predators of walleye on this lake (C. Adams, pers. comm.). Based on these studies and your discussion, it's not apparent to me that controlling cormorants will restore fish populations or significantly benefit them. While I accept that reducing numbers of cormorants will likely lead to fewer fish consumed in certain areas, it does not follow that larger healthier fish populations with more fish available to anglers will be the end result. It is misleading to suggest otherwise."

In a published document by FWS biologists (Trapp et al. 1999), the authors state:

"In response to concerns expressed by anglers, the U.S. Fish and Wildlife Service conducted an extensive review of published studies done throughout the U.S. and Canada on the impacts of Double-crested Cormorants on sport fish populations in open waters. The literature review indicated that fish species valued by sport and commercial anglers make up a very small proportion of the cormorants' diet and that these birds have a very minor effect on fish populations compared to the effects of sport and commercial fishing, natural predation, and other mortality factors....On the basis of literature review and the survey responses, it does not appear that a strategy of reducing Double-crested Cormorant populations to benefit sport fish is biologically warranted at this time."

We concur with scientists cited above. All of the studies done so far, with the exception of the work at Lake Oneida, do not convincingly demonstrate that DCCOs are causing declines in fish populations. Cormorant controls at Lake Oneida have been permitted by the FWS for years. We suggest that the current system of the issuance of individual FWS permits, with FWS review, be continued as well as the aquaculture depredation order in the 13 states. In evaluating the impact of cormorants on fish populations, it is important to distinguish between perception and reality. The reality, supported by numerous scientific investigations, is that in almost all natural situations cormorants have a relatively minor impact on commercial or sport fish populations.

APHIS has already begun to escalate cormorant control under the Cormorant Depredation Order issued last October by the U.S. FWS. APHIS/WS-Michigan finalized plans in June for the eradication of thousands of cormorants on the Les Cheneaux Islands in Lake Huron. APHIS alleges that the cormorant control is necessary because the birds eat yellow perch. ABC, other national conservation groups, and top waterbird scientists challenged this program, submitted comments on the Environmental Assessment, and met with top WS officials—all to no avail. The Michigan WS Director was quoted as stating: "We will be making up much of the program as we go along. Our goal is to reduce the cormorant foraging in the Les Cheneaux area as a means of improving the yellow perch fishery. This is ground zero of the cormorant."

Scientists and conservationists are struck by the lack of scientific documentation linking cormorants to declines in yellow perch populations in Lake Huron or anywhere else in Michigan. A definitive peer-reviewed study to examine the impact of cormorant predation on yellow perch in the Les Cheneaux Islands concluded cormorants removed 24,000 legal-size yellow perch from 2.76 million legal-sized yellow perch in 1995. Annual mortality from all sources was estimated at 45%. The researchers concluded that other sources of mortality must therefore remove more than 40% of legal size perch, including 2.4% by sportfishing, and cormorant predation was not substantial. See Belyea et al. (1999).

WS also ignored the priority conservation status assigned to four of the islands. In a U.S. FWS commissioned study, four of the Les Cheneaux islands were recommended for conservation and protection because of the high number of breeding waterbirds. Scientists believe that control efforts will disturb the Great Blue Heron and Black-crowned Night-Heron (Michigan Species of Special Concern) nests mixed with cormorant nests on these islands. The U.S. FWS signed-off on the Michigan Cormorant control plan. APHIS is proceeding with proposals to control cormorants more broadly in other states, including Arkansas, under the FWS Depredation Order.

### C. AQUACULTURE.

To protect aquaculture, the USFWS issued a depredation order in March 1998 allowing those engaged in commercial aquaculture in Minnesota and 12 southern states to shoot Double-crested Cormorants without a FWS MBTA permit at aquaculture facilities or at state-operated hatcheries. Under that depredation order, an average of 35,874 DCCOs was reported killed each year from 1998-2000. Another 11,254 DCCOs were killed annually during this period under other FWS MBTA permits, including individual permits for aquaculture outside the 13 states.

ABC does not oppose the control of depredating DCCOs at aquaculture facilities as part of an integrated approach to reduce serious economic damage. Such controls are ongoing presently. We believe that limited lethal control at aquaculture facilities can be effectively used to reinforce non-lethal harassment techniques but should not be allowed for questionable population controls.

Strikingly, waterbird biologists and other scientists have repeatedly noted that increased lethal control has been widely shown to be an ineffective or temporary solution at best to predation from fish-eating birds. Shooting DCCOs and other fish-eating birds generally will not work well according to numerous scientific studies. For example, a published 2003 study found that lethal shooting was no more effective at controlling fish-eating birds than was harassment from non-lethal shooting. See Parrott, D., H. V. McKay, G. V. Watola,

J. D. Bishop, and S. Langton. 2003. Effects of a short-term shooting program on nonbreeding cormorants at inland fisheries. *Wildlife Society Bulletin* 31:1092-1098.

More research needs to be done on the use of cost-effective measures such as exclusion devices, both physical and functional barriers. Such devices as netting, wires, floating ropes, other flight inhibitors such as balloons, and underwater exclusion devices (such as submerged nets) could be employed. Non-lethal harassment at aquaculture facilities to frighten cormorants should be more fully explored as well. Even border collies have been used. Also, consideration should be given to provision of alternative prey and foraging sites, alteration of aquaculture practices, decreasing fish densities, use of pond dyes, aquaculture facility location, improved facility design, and altering stocking practices.

Many other species of fish-eating birds are taken at aquaculture facilities under FWS MBTA depredation permits. As aquaculture facilities have expanded rapidly over the last ten years, it should be obvious that killing more DCCOs will not resolve avian predation problems from DCCOs and from the other 64 species of birds that are known to eat fish in aquaculture facilities.

The October 2004 FWS Depredation Order expands controls of cormorants in aquaculture and allows for roost control by APHIS in the 12 southern aquaculture states and for broader DCCO control in 24 states. We opposed proposals in the Cormorant EIS to allow the USDA/APHIS to conduct unlimited lethal controls at winter roost sites in 12 aquaculture states. Linda Wires (University of Minnesota) formally submitted comments on the DEIS and stated:

“ The proposed alternative includes a provision to expand the Aquaculture Depredation Order to allow control at winter roosts in states under the Depredation Order. I believe expanding the Depredation Order to include shooting at night roosts is likely to be an ineffective strategy for reducing conflicts in the southeastern US for a number of reasons.”

The five scientists commenting on the FWS Cormorant EIS for the AOU likewise stated that the management of cormorants under the EIS “.... will not work well for several reasons, as shown based on the evidence from numerous scientific studies. First, controlling cormorants by lethal or non-lethal means is a very local affair, and every study to date shows that constant and continuing effort must be taken to keep birds off ponds. The cormorants habituate to static or automated deterrents quickly, and killed birds are soon replaced from nearby. Second, reducing local breeding populations as a means of control ignores the continental range of the species and their seasonal migrations. Local reductions will have a minuscule impact on a continental scale, and thus the same problem will be revisited in the next season when new wintering birds appear. Third, cormorants are not the only fish predator on aquaculture ponds; herons and pelicans have similar behaviors but not the numbers at present. Selectively culling the most numerous species of fish predator—Double-crested Cormorants—from aquaculture ponds will only shift the problem to the other species. DCCOs are opportunistic feeders, and they are able to range over great distances (particularly during then the non-breeding season) in search of food, preferentially aggregating at rich food sources. As a consequence of localized culling, these sites could become large population sinks, where killed birds are soon replaced by others seeking a rich food source. The continuing influx of new birds means that these sites would become the last places for cormorant numbers to decline even when continental numbers are declining rapidly.”

We support continuation of the aquaculture depredation order, continued issuance of individual permits, and expansion of non-lethal techniques to minimize loss of fish to DCCOs and other fish-eating birds as the best course for protecting the economic interests of the aquaculture industry. Focusing on DCCO roost control and other DCCO population measures will do little, if anything, to resolve overall losses from avian predation.

Great Blue Herons were cited by fish farmers in a survey by Wywialowski (1999) as the number two species, after DCCOs, responsible for taking channel catfish in 1996. Egrets and pelicans were next in line. Is a Depredation Order next for the Great Blue Heron, egrets and pelicans? Aquaculture farms need to be sited, designed, operated, and modified to be more resistant to bird predation or else conflicts with fish-eating birds will continue.

#### CONCLUSION.

In conclusion, our opposition is based on the following:

1. This legislation would undermine migratory bird conservation under the Migratory Bird Treaty Act by shifting authority for take and management to APHIS from the U.S. FWS.

2. APHIS is not structured to work with multiple partners for the conservation of migratory birds, as their mission is wildlife damage control, not fostering migratory bird conservation.
3. Exempting bird management/take by APHIS from NEPA would be extremely damaging to our nation's environmental policy setting system and would close off public and scientific input and analysis.
4. Citizens, especially anglers, have perceptions that cormorants and other fish-eating birds significantly impact sport and commercial fisheries. Most all of these perceptions are not scientifically valid.
5. Increased lethal control has been widely shown to be an ineffective or temporary solution at best to predation from fish-eating birds. Shooting Cormorants and other fish-eating birds generally will not work well according to numerous scientific studies.
6. Controls of fish-eating and other birds are being implemented under the current system of a 1998 FWS Aquaculture Depredation Order, the October 2003 FWS Public Resource Depredation Order and roost control in 12 aquaculture states, and under individual permits for the killing of migratory birds. APHIS is the only agency given State or Regional FWS MBTA permits for migratory bird control.

We thus OPPOSE H.R. 3320 and believe it will seriously jeopardize migratory bird conservation.